

CLASS SPECIFICATION
County of Fairfax, Virginia

CLASS CODE: 6554 **TITLE:** INDUSTRIAL ELECTRICIAN III **GRADE:** S-20

DEFINITION:

Under general supervision, performs as a lead worker to supervise and participate in the installation, modification, maintenance, and repair of industrial electrical systems, controls, and equipment; and performs related work as required.

DISTINGUISHING CHARACTERISTICS OF THE CLASS:

The Industrial Electrician III class denotes skilled journeyman level electricians who have progressed, on a selective basis, from the Industrial Electrician II journeyman level through acquired experience and demonstrated proficiency. Incumbents in the Industrial Electrician III class exercise a high degree of independent judgment and act in the capacity of working leaders over subordinate level Industrial Electricians. In the absence of the Industrial Electrician Supervisor, incumbents may temporarily assume higher-level supervisory responsibility.

ILLUSTRATIVE DUTIES:

Plans and assigns the work of a crew consisting of apprentice and journeyman level industrial electrical workers;

Makes inspections of plant operating motors, distribution centers, motor control centers, electronic air filter packs and other electrical equipment and initiates corrective action as required;

Participates in the maintenance and repair of electrical control panels and electrical circuits, motors, distribution centers, breakers, pumps, motor controls, switch gears, relays, regulators, and other electrical or electronic equipment; troubleshoots the most complex electrical problems;

Monitors the inventory of repair and replacement parts and supplies and initiates purchase requests as needed;

Enforces safety regulations and participates or instructs in proper lock out tag out procedures.

Diagnoses and troubleshoots live electrical circuits where a blue print or schematic may not be available;

Creates own schematics and inserts them into the plant online O&M manuals;

Troubleshoots equipment, control, and power system failures to determine the cause and corrective action required, in accordance with electrical code and safety guidelines;

Troubleshoots the most complex electrical problems on motors up to 1250 HP and generators up to 2500KW;

Makes necessary repairs and replacements, and tests effectiveness of corrective action; installs, extends, and replaces circuits, controls, motors and other electrical equipment in accordance with electrical code and safety guidelines;

Installs circuits for power, lighting and equipment using all types of wiring methods (i.e. rigid metal conduits up to 4" and conductors up to 500MCM.);

Responds to routine and emergency service calls after normal working hours;

May serve as a team leader to other sections to provide guidance/direction and instruction, appraising performance, serving on selection panels and inspecting/approving the work performed by team members.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

Thorough knowledge of the standard practices, tools, and equipment of the electrical trade;

Thorough knowledge of applicable county, state and national electrical, NFPA and safety codes;

Thorough knowledge of safety regulations and procedures as well as common hazards associated with and precautionary methods peculiar to working with electricity;

Ability to plan and perform work of the trade at the Master-level;

Thorough knowledge of electrical controls and motors, including high voltage three-phase service;

Ability to troubleshoot and repair industrial type electrical systems and equipment;

Ability to follow written and oral instructions as well as diagrams, schematics, blue prints and manufacturer's manuals;

Ability to work effectively in a variety of working conditions that may include inside and outside work in inclement weather, climbing ladders and scaffolding, and descending underground, as well as exposure to hazardous chemicals, infectious bacteria, and the hazards of high voltage electrical shock.

Ability to maintain good interpersonal relationships;

Ability to train/instruct and provide guidance/direction to subordinates and train less experienced industrial electricians and employees from other sections;

EMPLOYMENT STANDARDS:

Any combination of education and experience equivalent to high school graduation or a G.E.D. issued by a state department of education, AND;

Successful completion of an approved electrician's apprentice program, PLUS;

Three years of experience as a journeyman electrician at the level of Industrial Electrician II or equivalent journeyman level experience.

NECESSARY SPECIAL REQUIREMENTS:

Adequate color perception to distinguish colors of electrical wiring.

CERTIFICATES AND LICENSES REQUIRED:

Possession of a valid Master Electrician License.

Possession of a valid Air-Conditioning & Refrigeration Institute Certificate (ARI).

Possession of a valid state motor vehicle operator license.

REVISED: August 31, 2006
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